

US ARMY CORPS OF ENGINEERS PERMANENT CANAL CLOSURES AND PUMPS INDUSTRY DAY BRIEF

Overview

The Government seeks, through the solicitation and award of a Design Build Contract, a long-term remedy for a hurricane protection related problem in the New Orleans area. The problem is the protection of three canals (17th Street, Orleans Avenue, and London Avenue) from the Lake Pontchartrain storm surge, while not impeding the ability of the area's internal drainage system to function. This includes design and construction of pumps, with stand alone auxiliary power supply capacity, sufficient to evacuate the drainage fed to the canals. The project design criteria for the pumping capacities of the three canals is: 17th Street, 12,500 cubic feet per second (cfs); Orleans Avenue, 2,700 cfs and London Avenue, 9,000 cfs. This work is authorized under Public Laws 109-234, 110-28, and 110-252, to modify the 17th Street, Orleans Avenue, and London Avenue Drainage Canals and install pumps and closure structures at or near the lakefront.

Procurement Approach

The Government intends to procure Design Build services by means of the Corps of Engineers Two – Phase method (FAR Part 36.3).

1. In Phase One, (RFP-1) the Army Corps of Engineers will issue a solicitation and from respondents to the RFP-1, select, based on qualifications, a short list of three to five firms.
2. In Phase Two (RFP-2), the Corps of Engineers will issue the Design Build Request for Proposal (RFP-2) to the short listed firms and request their proposed technical approach, and associated price.

The Government will select a winning offeror based on Best Value. To encourage innovative solutions to the stated problem, the Government will not prescribe a design but rather provide key technical data to the shortlisted firms, along with design and performance criteria. The Corps of Engineers has AE firms under contract, developing pre-design engineering and environmental data. This data will be made available to proposers for their use.

The task of developing and optimizing the best technical approach is left to the proposers. The Government, however, has no particular bias toward any particular technical approach studied by any of its contractors. It remains the responsibility of the proposer to collect any additional data they determine necessary to develop their technical approach.

While RFP-2 evaluation criteria have not been fully developed, at least the following factors are currently under consideration: Past Performance, Technical Approach, Management Team, Cost and Socioeconomic subcontracting. The Government is interested in using proposer input to improve its RFP-2, and intends to issue a draft RFP, followed by a pre-proposal conference, and then issue final RFP-2 to the shortlisted firms. The contract type whether firm fixed price, firm price incentive (firm target) has not yet been determined. CAS Compliance may be required in Phase Two.

Scope

The Design Build scope of work includes all architectural, engineering, permit support, procurement, construction, testing, start-up and commissioning, project management, quality control and other related services to design and construct a system to protect the City of New Orleans and Jefferson Parish from storm surge-induced flooding.

The general scope of work includes the following major facilities and activities:

- Three (3) new pump stations that shall operate in series with and at the full programmed capacity of the existing drainage pump stations (DPS) and shall be fully operational without dependence on the power grid;
- Transition walls and levees to tie the new pump stations into the existing hurricane line of protection;
- Facilities to provide an independent power source for each new pump station;
- Pump station structure shall be storm proofed for on-site operational personnel;
- Gates that will allow the canals to be isolated from Lake Pontchartrain during periods of high lake level due to storm surge and also allow gravity flow of canal water to the lake;
- Full canal flow during construction must be maintained;
- Monitoring and control systems that provide local and remote monitoring and control of all pumps, gates, and related equipment;
- Communication systems for coordination of flows with the existing DPS;
- Testing, commission, and turnover of all facilities;
- Removal of the Interim Closure Structures (ICS);
- Removal and disposal of any demolished structures, excavated soils and contaminated materials;
- Temporary on-site offices for Government personnel during construction.

General Facility Descriptions & System Operation

The project involves construction of facilities at three proposed sites in the New Orleans area. Each site will include similar facilities but will require unique design and construction considerations.

Each pump station shall include a closure to isolate the canal from the lake during storm surge conditions. The purpose is to protect the City of New Orleans and Jefferson Parish from storm surge-induced flooding through the 17th Street, Orleans Avenue, and London Avenue Canals, while not impeding the ability of the area's internal drainage system to function.

Each new pump station shall operate in series with the existing upstream DPS. Each new pumping station and its related systems must remain operational during hurricane conditions. Therefore, each pumping station shall be storm proofed for on-site operations staff. The facilities must operate without reliance on the local power grid.

The Government currently operates a storm surge protection system called the Interim Closure Structure (ICS). The Design Build Contractor must design, construct and test the new pumping stations in a manner which does not impede the Government's operation of the ICS.

The three canals shall remain in a fully operable condition at all times. This requires the Design Build Contractor to provide and maintain a continuous full flow system for each canal.

The Design Build Contractor will optimize design to provide for potential future deepened drainage system at a government specified sill elevation. Providing a deepened foundation under this contract will permit future adaptations without having to replace the pump station foundation. Design Build Contractors will be invited to offer higher sill elevations based on their detailed design analysis.

Operation & Maintenance

The facility will be turned over to the Local Stakeholder at the completion of the project for Operation and Maintenance. The Government desires that the Local Stakeholder's annual O&M costs be minimized.

Proposed Project Sites

A general site map of the three currently proposed sites is shown in the figure below:



Figure 1.1. General Overview of Proposed Site Locations

The figures below show the general construction areas designated for each of the three proposed sites. Portions of the site are reserved for permanent structures and those portions for use only during the construction phase are shown in the figures below. It is the intent of the Government that disruption to local residential, commercial, and industrial operation be minimized.



Figure 1.2 17th Street Canal Proposed Site



Figure 1.3 Orleans Ave Canal Proposed Site



Figure 1.4 London Ave Canal Proposed Site

Question and Answer Session at Industry Day

The question and answer session must be viewed with the understanding that all responses provided at the Industry Day should be considered general information. Information presented during this session is not the government’s official response or position. The official responses will be via separate posting and following Industry Day.

Questions may be submitted during the intermission on 3” x 5” cards (to be provided). Cards must be turned in immediately following the Government’s presentation. The Government will review cards, read questions from the cards and present answers.

Industry Day Location

The U.S. Army Corp of Engineers - New Orleans District will hold an Industry Day Conference on 22 January 2009, 1:00 p.m. at the Hilton New Orleans Airport, 901 Airline Drive Kenner, LA 70062.